

W. L. Brown, Jr.
COLLECTION

Bulletin of the Museum of Comparative Zoölogy
AT HARVARD COLLEGE.

VOL. LIX. No. 7.

TWO NEW GENERA OF MYRMICINE ANTS FROM
BRAZIL.

BY WILLIAM MORTON WHEELER.

CAMBRIDGE, MASS., U. S. A.:
PRINTED FOR THE MUSEUM.

NOVEMBER, 1915.

No. 7.— *Two New Genera of Myrmicine Ants from Brazil.*

CONTRIBUTIONS FROM THE ENTOMOLOGICAL LABORATORY OF
THE BUSSEY INSTITUTION, HARVARD UNIVERSITY. NO. 103.

BY WILLIAM MORTON WHEELER.

Mr. C. William Beebe, of the New York Zoölogical Park, recently sent me for identification nineteen vials of ants which he collected May 15, 1915, in a suburb of Pará, at the mouth of the Amazon. The specimens were all taken from four square feet of jungle mold at the foot of a single tree, whose bird fauna (76 species!) Mr. Beebe studied for a week. In addition to the ants he took from the same little patch of mold a number of beetles, termites, springtails, bugs, pseudoscorpions, ticks, mollusks, and worms. The collection of ants comprises seventeen species, two of which are of singular structure and evidently represent new genera. The fifteen other species are recorded in the following list:—

Pachycondyla harpax Fabr. One worker.

Euponera (*Trachymesopus*) *stigma* Fabr. Two workers.

Ponera opaciceps Mayr. Six workers.

Anochetus mayri Emery. One deälated female.

Solenopsis subtilis Emery. Fifteen workers, one male, and one deälated female.

Crematogaster victima F. Smith, var. One deälated female.

Pheidole flavens Roger subsp. *exigua* Emery. One soldier, three workers, three males, and one deälated female.

Pheidole subarmata Mayr. Two workers and one deälated female.

Trachymyrmex sp. One deälated female, without head.

Cyphomyrmex rimosus Spin. One deälated female.

Rhopalothrix (*Octostruma*) *balzani* Emery. Twelve workers and one deälated female.

Strumigenys subdentata Mayr. One deälated female.

Prenolepis steinheili Forel. Four workers and three males.

Rhizomyrma goeldii Forel. Nine workers.

Camponotus (*Myrmothrix*) *abdominalis* Fabr. var. One deälated female.

The solitary deälated females of the species of *Anochetus*, *Crematogaster*, *Trachymyrmex*, *Cyphomyrmex*, and *Camponotus* were evi-

dently establishing colonies. At least eight of the species, viz. those belonging to the genera *Euponera*, *Ponera*, *Solenopsis*, *Rhopalothrix*, *Strumigenys*, *Rhizomyrma* and the two new genera *Blepharidatta* and *Glamyromyrmex* are hypogaeic (subterranean) ants, with small-eyed workers. With the exception of *Pachycondyla harpax* and *Camponotus abdominalis* all of the species are small or very small. I subjoin descriptions of the two peculiar species representing new genera.

BLEPHARIDATTA, gen. nov.

Worker. Small, monomorphic. Mandibles triangular, their apical margins with a few subequal teeth. Clypeus vertical, bicarinate. Frontal area large, frontal groove absent. Eyes moderately large and very convex. Ocelli lacking. Antennae 11-jointed, funiculus with a well-defined 2-jointed clava. Head rather large, with a deep scrobe on each side, extending its full length and bordered above by the frontal carinae which are large, expanded and horizontal, lobulate in front and extending to the posterior corners of the head. The inferior or lateral border of each scrobe is formed by a ridge as long as the frontal carina and running just above the eye. Thorax moderately long and slender, without promesonotal and mesoepinotal sutures; humeri and inferior angles of pronotum dentiform; epinotum armed with a pair of long spines; metasternal angles large, compressed and sharply angular above. Petiole long and slender, pedunculate, with a low, rounded node. Postpetiole small, subglobular. Gaster small, spherical, first segment very large, without ridges, grooves or tubercles; remaining segments very small. Sting vestigial. Legs rather slender; middle and hind tibiae without spurs; claws simple.

Head, thorax, pedicel, and appendages opaque, sculptured; gaster smooth. Upper surface of body beset with long, paired, very sparse, stiff, and blunt hairs.

BLEPHARIDATTA BRASILIENSIS, sp. nov. (Fig. 1).

Worker. Length nearly 2 mm.

Head nearly $\frac{3}{5}$ longer than broad, narrower in front than behind, with strongly and broadly excised and marginate posterior border and nearly straight lateral borders, its dorsal and gular surfaces feebly

convex, its posterior corners produced as prominent angular tubercles. Scrobes of nearly uniform transverse diameter throughout their length and sufficiently deep to accommodate the antennae. Frontal carinae expanded and lobular anteriorly, with translucent and slightly reflected borders throughout their length. Mandibles rather large, with moderately convex external borders, the apical borders rather oblique, with four subequal teeth. Clypeus with evenly rounded, entire anterior border, flattened in the middle between the two prominent longitudinal carinae and transversely impressed at the anterior border. Frontal area semicircular. Antennae slender, scapes reaching nearly to the posterior corners of the head, their apical halves distinctly thickened; first funicular joint large, fully twice as long as broad; joints 2-7 narrower, a little broader than long, joint 8 as long as broad; joint 9, the basal joint of the clava, longer than broad and twice as broad as the preceding joints; terminal joint large, pointed, nearly three times as long as broad. Thorax narrower than the head, more than twice as long as broad, broadest through the humeri, in profile more than twice as long as high, feebly and evenly convex above. Pronotum with acute, dentate anterior corners, from which there run a pair of distinct longitudinal ridges, gradually converging posteriorly to the epinotal spines. Each of these ridges bears two minute teeth. Epinotum sloping, concave in the middle, marginate on the sides below the spines, which are long, straight, acute, close together at their insertions and directed backward, outward and upward. Metasternal angles thin, translucent, broad and sharply angular above. Petiole fully three times as long as broad or high, with a short distinct peduncle in front and constricted behind the node, which is evenly and feebly convex above; seen from above the segment is broadest at its posterior margin. Postpetiole a little broader than the petiole but scarcely higher, from above rectangular, a little broader than long, in profile feebly convex above. Gaster subcircular from above, with straight basal margin.

Gaster smooth and shining; remainder of the body, including the appendages opaque, very finely and densely punctate-rugulose. Head above between the frontal carinae with six coarse, longitudinal rugae connected by sparse, indistinct transverse rugules or reticulations. Pronotum above with four feeble longitudinal rugae. Pleurae very indistinctly and irregularly rugose. Petiole and antennal scapes indistinctly longitudinally rugulose. Postpetiole and legs very finely and densely punctate. Gaster very finely and indistinctly shagreened, at the base above densely punctate and opaque.

Hairs yellowish; those on the upper surface of the body very long, slightly curved, of uniform thickness and blunt, arranged very regularly in pairs. On the head nearly all of them arise from the edges of the frontal carinae where the insertion of each hair is a minute tubercle; on the thorax the hairs are inserted along the ridges connecting the humeral angles with the epinotal spines. The petiole bears three, the postpetiole two pairs of these peculiar pairs. On the gaster there are four regular equidistant rows, with about six hairs in each

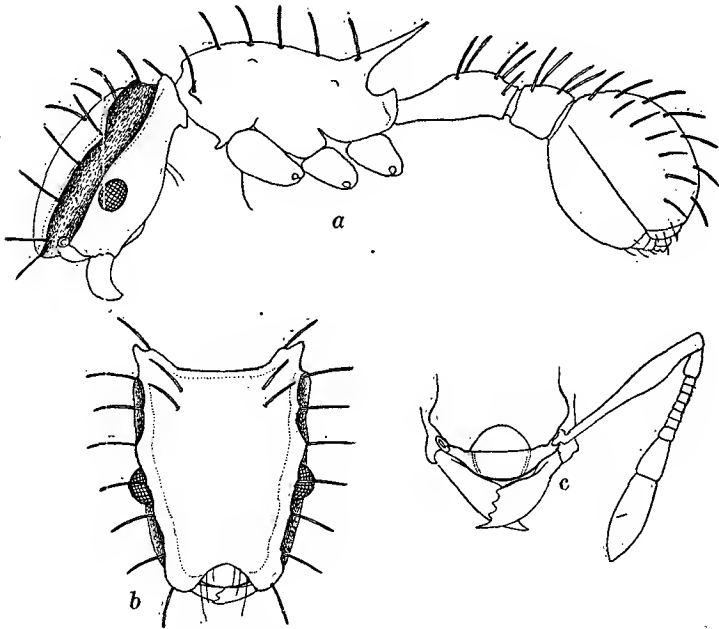


FIG. 1.—*Blepharidatta brasiliensis*, sp. nov. a, worker, lateral view; b, head of same from above; c, mandibles, clypeus and antenna of same from the front.

row. Each fore coxa bears a single long hair and there is a pair of hairs on the gula. Legs, antennae, and terminal gastric segments with numerous, short, appressed pointed hairs and the dorsal surface of the gaster also with a few scattered reclinate hairs.

Color ferruginous; antennae, legs, tip and sides of gaster somewhat paler and more yellowish.

Described from ten specimens; Cotype M. C. Z. 9040.

This extraordinary ant is evidently to be placed in the tribe Attiini,

but it differs so much from the other known genera in the structure of the head and especially in the 2-jointed club of the antennae, the 4-toothed mandibles and the regularly arranged, setiform hairs on the dorsal surface, that it seems necessary to establish a distinct genus for its accommodation. Apart from the head, the structure of the body is very simple and primitive for an Attiine ant, even simpler and more primitive than in the genus *Proatta*, recently established by Forel for a unique Sumatran species. It would be interesting to know whether *Blepharidatta brasiliensis* cultivates fungi like all the other known American Attiini.

GLAMYROMYRMEX, gen. nov.

Worker. Small, monomorphic; closely related to *Strumigenys* and *Epitritus*, but differing greatly from these genera in the structure of the head, which is suboblong, with deep scrobes on the sides above the eyes for the accommodation of the antennae. Lateral border of the head forming with the expanded frontal carina and external border of the clypeus a translucent plate overarchng the scrobe on each side. Gular region rather narrow so that the eyes, which are small and in front of the middle of the head are approximated and seem to be on its lower surface. Upper surface of head rather flat, separated by a very indistinct suture from the transverse clypeus. Ocelli, frontal groove, and frontal area absent. Mandibles small, with distinct apical borders, armed with a regular row of rather slender acute teeth. Antennae 6-jointed, funiculus with a 2-jointed clava. Thorax, pedicel, and gaster much as in *Strumigenys*; petiole, postpetiole, and base of gaster bearing spongiform appendages. Epinotum armed with a pair of spines and with acute metasternal angles. Upper surface of head smooth and shining, sculpture of remainder of body much as in *Strumigenys*. Hairs slender and pointed, not clavate.

Female. Head decidedly shorter and broader than in the worker and narrowed in front, but otherwise of similar structure. Eyes larger, ocelli well-developed. Remainder of body much like that of *Strumigenys*, and the wings of similar but even more reduced venation, as the base of the cubital vein is largely obsolete, although the anal vein is present. Petiole, postpetiole, and base of gaster with fungiform appendages as in the worker.

Male. Closely resembling the male of *Strumigenys*. Mandibles very small, with only a single, apical tooth. Head of the usual struc-

ture, without dilated lateral margins or scrobes. Eyes very large and prominent, ocelli only moderately large and rather far apart. Antennae 13-jointed, with very short scapes. Thorax robust, broader than the head, mesonotum with deep Mayrian furrows, scutellum very convex. Petiole and gaster without fungiform appendages, those on the postpetiole minute and vestigial. Wings as in the female.

GLAMYROMYRMEX BEEBEI, sp. nov. (Fig. 2).

Worker. (Fig. 2a and b). Length 1.5–2 mm.

Head $1\frac{1}{2}$ times as long as broad, slightly broader behind than in front, with deeply excised posterior and more feebly excised lateral borders and broadly rounded anterior and posterior corners; behind feebly convex, flattened in the middle and with sloping clypeus. Mandibles convex, with about 8 slender and crowded teeth, which are longest at the apex. Clypeus much broader than long, flattened, with arcuately and deeply excised anterior and convex posterior border. Antennal scapes tenuous at the base, somewhat thickened and fusiform in the middle. First funicular joint fully twice as long as broad and much broader than the two succeeding joints; second joint longer than broad, third as broad as long; fourth longer than broad and less than $\frac{1}{3}$ as long as the rather tapering terminal joint. Thorax much narrower than the head, broadest through the pronotum, which is as broad as long and evenly convex above, with minute but distinct humeral angles. Pleurae rather flat. Mesonotum sloping to a feeble constriction in front of the epinotum, the latter a little longer than broad, its base marginate on the sides and passing into the subequal declivity through a blunt angle. Spines laterally compressed, straight and acute, as far apart at their bases as long, directed backward and upward. Petiole fully twice as long as broad, pedunculate in front, with a low rounded node behind and with three spongiform appendages, one forming a narrow longitudinal band on the median ventral surface, the others a triangular mass on each side of the node. Postpetiole transversely elliptical, distinctly broader than the petiole, with a large spongiform mass enveloping its sides and ventral surface. Gaster as large as the head, elliptical, with straight basal border and a small fungiform mass on the anteroventral surface. Legs rather slender.

Smooth and shining; mandibles and head covered with minute, sparse, piligerous punctures, the lateral borders of the head above

longitudinally striate. Gula, pleurae, meso- and epinotum, and petiole opaque, densely and coarsely punctate-rugulose; gaster with a series of strong longitudinal rugae on the dorsal surface at the anterior margin.

Hairs and spongiform appendages sordid yellowish. Head with delicate hairs, which are short, sparse, and appressed on the dorsal

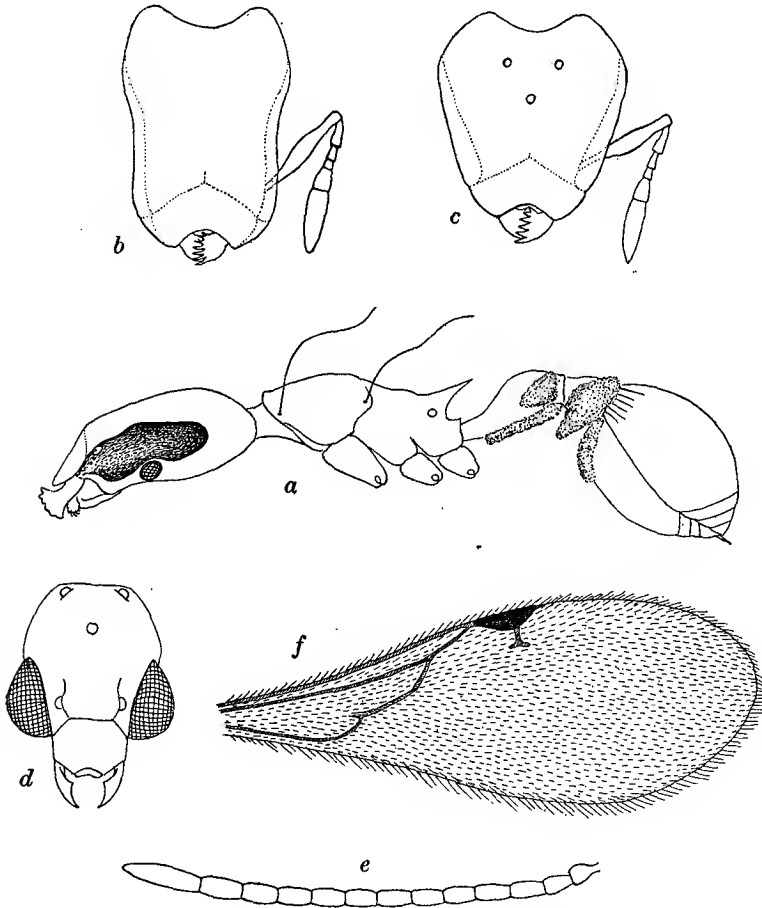


FIG. 2.—*Glomyrmyrmex beebei*, sp. nov. a, worker, lateral view; b, head of same from above; c, head of female from above; d, head of male from above; e, antenna of male; f, wing of same.

surface but longer, denser and more oblique on the gula. Thorax with two pairs of very long, slender, flagelliform hairs, one on the humeral angles and one on the posterior corners of the pronotum. Petiole, postpetiole, and gaster with a few long, slender, erect hairs. Antennae and legs with short, subappressed hairs.

Castaneous; upper surface of head and gaster blackish; mandibles, translucent lateral borders of head and clypeus, antennae and legs paler and more reddish or even slightly yellowish.

Female. (Fig. 2c). Length 2.6 mm.

Head only slightly longer than broad, decidedly broader behind than in front, with straight sides, deeply concave posterior border and obliquely truncated posterior corners; in other respects, except for the larger eyes and the presence of ocelli, like the head of the worker. Thorax through the wing-insertions nearly as broad as the head, somewhat longer than high, narrowed in the pronotal region, with bluntly angular humeri. Mesonotum flattened above; scutellum convex, with acute, projecting posterior border. Epinotum abrupt and concave in profile, its spines and metasternal angles larger than in the worker, more translucent and compressed. Petiole, postpetiole, and gaster as in the worker.

Sculpture, pilosity, and color as in the worker, but the upper surface of the mesonotum and scutellum is opaque and coarsely longitudinally rugose, with reticulate-rugulose interrugal spaces, the mesopleurae are smooth and shining and the postpetiole is subopaque and finely punctate above. The flagelliform hairs on the humeral angles are shorter and there are numerous erect, slender hairs on the mesonotum. Wings with uniformly brownish membranes, dark brown stigma and resin-colored veins.

Male. (Fig. 2d, e, and f). Length 2 mm.

Head longer than broad, with very short cheeks, feebly rounded postocular borders and rather straight, marginate occipital border. Mandibles very small, triangular, with feebly convex external borders and acute tips. Clypeus a little broader than long, subhexagonal, with the anterior border arcuately excised in the middle. Frontal carinae subparallel, reaching to the middle of the head, rather far apart. Antennae long, their scapes scarcely twice as long as broad and scarcely longer than the first funicular joint; all the funicular joints subcylindrical, longer than broad, the terminal joint longest. Thorax shaped much as in the female but broader than the head. Epinotal spines and metasternal angles shorter and blunter, not compressed and translucent. Petiole with a slightly more angular node in profile, postpetiole more transverse and less elliptical.

Opaque; with only the gaster, mesopleurae, and legs smooth and shining. Head densely and uniformly punctate; thorax, petiole and postpetiole coarsely punctate-rugulose; sides of mesonotum above irregularly and longitudinally rugose. Gaster with short longitudinal rugae at the base.

Hairs pale yellowish, very sparse, slender and rather short and inconspicuous on the body. Flagelliform hairs on the thorax feebly developed. Hairs on the legs delicate, appressed.

Black; thorax and pedicel dark brown; mandibles, antennal scapes, first funicular joint and legs piceous, tibiae and femora darker in the middle. Wing membranes, stigma, and veins distinctly paler than in the female.

Described from three workers, three females and two males belonging to the same colony: Cotype M. C. Z. 9039.

This singular ant belongs to the tribe Dacetoniini and is evidently closely related to the species of *Strumigenys*, *Epitritus*, and *Pentastroma* but differs greatly from these and all the other known members of the tribe in the structure of the head, which recalls that of the *Cryptoceriini*, though the eyes in this tribe are behind and not beneath the deep antennal scrobes.